

PATENT
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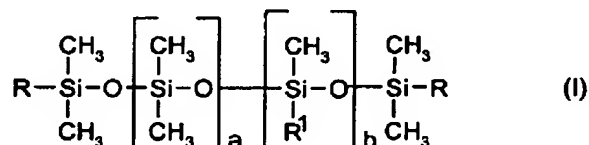
AMENDMENTS TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

In the Claims:

Claim 1 (currently amended)

1. A method for dispersing at least one pigment and optionally a filler in the aqueous pigment formulation of claim 5 ~~an aqueous pigment paste, ink or paint formulation, which comprises at least one pigment and optionally a filler,~~ said process comprises mixing in a in an aqueous dispersing medium the pigment and optionally the filler with at least one organofunctional modified polysiloxane of the general formula



in which

R is in each case identical or different and is R¹ or -CH₃,

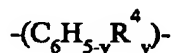
R¹ is -(CH₂)_e-O-(CH₂-CH(Ph)-O)_e-(C_nH_{2n-x}R²_x-O)_d-R³ wherein e is ≥ 1, or

R¹ is at least one -(CH₂)_e-O-(CH₂-CH(Ph)-O)_e-(C_nH_{2n-x}R²_x-O)_d-R³ and is at least one -CH₂-CHR*-Ph wherein e is 0 or ≥ 1, with the proviso that if e is 0 the value of b is an integer > 1;

R* is H or -CH₃,

R² is an alkyl residue having 1 to 5 carbon atoms,

Ph is a phenyl derivative having the general formula



in which

R⁴ is a hydroxyl residue, an alkyl residue or an alkoxy residue, and

y is from 0 to 5,

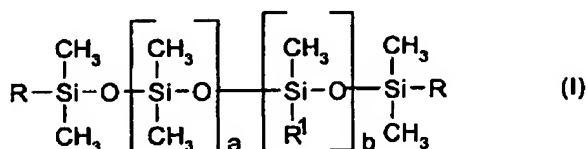
R³ is hydrogen, an alkyl chain, a benzyl residue, an alkyl-substituted benzyl residue, a group COR⁵ with a residue R⁵ which has an alkyl chain, a group CONHR⁶ with a residue R⁶ which comprises a hydrogen atom or an alkyl chain, or CO₂R⁷, wherein R⁷ is alkyl chain,

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c is from 2 to 6,
d is from 3 to 70,
n is from 2 to 4,
x is 0 or 1,
a is from 0 to 100,
b is from 1 to 100,
with the proviso that $a + b = 1$ to 100.

Claim 2 (currently amended)

2. The method according to claim 1 wherein the organofunctional modified polysiloxane is a compound of the formula



in which

- R is in each case identical or different and is R^1 or $-\text{CH}_3$,
 R^1 is $-(\text{CH}_2)_e-\text{O}-(\text{CH}_2-\text{CH}(\text{Ph})-\text{O})_e-(\text{C}_n\text{H}_{2n-x}\text{R}^2_x-\text{O})_d-\text{R}^3$ wherein $e \geq 1$, or
 R^1 is at least one $-(\text{CH}_2)_e-\text{O}-(\text{CH}_2-\text{CH}(\text{Ph})-\text{O})_e-(\text{C}_n\text{H}_{2n-x}\text{R}^2_x-\text{O})_d-\text{R}^3$ and is at least one $-\text{CH}_2-\text{CHR}^*- \text{Ph}$ wherein e is 0 or ≥ 1 , with the proviso that if e is 0 the value of b is an integer > 1 ;
 R^* is H or $-\text{CH}_3$,
 R^2 is an alkyl residue having 1 to 5 carbon atoms,
Ph is a phenyl derivative having the general formula



in which

- R^4 is a hydroxyl residue, an alkyl residue having 1 to 6 carbon atoms or an alkoxy residue having 1 to 6 carbon atoms, and
 y is from 0 to 5,

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R^3 is hydrogen, an alkyl chain having 1 and up to 18 carbon atoms, a benzyl residue, an alkyl-substituted benzyl residue having up to four carbon atoms in the alkyl residue, a group COR^5 with a residue R^5 which has an alkyl chain having 1 to 18 carbon atoms, a group $CONHR^6$ with a residue R^6 which comprises a hydrogen atom or an alkyl chain having 1 to 18 carbon atoms, or CO_2R^7 , which has an alkyl chain R^7 having 1 to 18 carbon atoms,

c is from 2 to 6,

d is from 3 to 70,

n is from 2 to 4,

x is 0 or 1,

a is from 0 to 100,

b is from 1 to 100,

with the proviso that $a + b = 1$ to 100.

Claim 3 (previously presented)

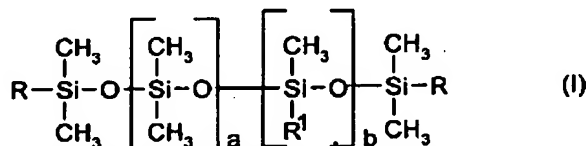
3. The method according to claim 1, wherein R^1 in formula (I) is the residue $-(CH_2)_{2-3}-O-(CH_2-CH(Ph)-O)_{1-4}-(C_2H_4-O)_{3-50}-H$.

Claim 4 (currently amended)

4. The method according to claim 1 where the aqueous pigment formulation ~~pigment paste, ink or paint~~ comprises a filler.

Claim 5 (currently amended)

5. An aqueous pigment formulation which comprises about 5 to about 80 parts by weight of a pigment, water, 0 to about 20 parts by weight of a dispersing resin, about 0.1 to about 5



parts by weight of at least one auxiliary and/or additive, 0 to 20 parts by weight solvent and about 3 to about 50 parts by weight of at least one organofunctional modified polysiloxane of the general formula

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in which

R is in each case identical or different and is R¹ or -CH₃,

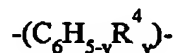
R¹ is -(CH₂)_c-O-(CH₂-CH(Ph)-O)_e-(C_nH_{2n-x}R²_x-O)_d-R³ wherein e is ≥ 1, or

R¹ is at least one -(CH₂)_c-O-(CH₂-CH(Ph)-O)_e-(C_nH_{2n-x}R²_x-O)_d-R³ and is at least one -CH₂-CHR*-Ph wherein e is 0 or ≥ 1, with the proviso that if e is 0 the value of b is an integer > 1;

R* is H or -CH₃,

R² is an alkyl residue having 1 to 5 carbon atoms,

Ph is a phenyl derivative having the general formula



in which

R⁴ is a hydroxyl residue, an alkyl residue or an alkoxy residue, and

y is from 0 to 5,

R³ is hydrogen, an alkyl chain, a benzyl residue, an alkyl-substituted benzyl residue, a group COR⁵ with a residue R⁵ which has an alkyl chain, a group CONHR⁶ with a residue R⁶ which comprises a hydrogen atom or an alkyl chain, or CO₂R⁷, wherein R⁷ is alkyl chain,

c is from 2 to 6,

d is from 3 to 70,

n is from 2 to 4,

x is 0 or 1,

a is from 0 to 100,

b is from 1 to 100,

with the proviso that a + b = 1 to 100; and

the remainder water.

Claim 6 (cancelled)

Claim 7 (currently amended)

7. The aqueous pigment formulation according to claim 5, ~~claim 6~~, wherein the pigment is an organic pigment.

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Claim 8 (previously presented)

8. The aqueous pigment formulation according to claim 7, wherein the organic pigment is an azo pigment, a polycyclic pigment, a diketopyrrolopyrrole or a quinophthalone.

Claim 9 (currently amended)

9. The aqueous pigment formulation according to claim 5, ~~claim 6~~ wherein the pigment is an inorganic pigment.

Claim 10 (currently amended)

10. The aqueous pigment formulation according to claim 5, ~~claim 9~~ wherein the inorganic pigment is an iron oxide, a spinel pigment, an ultramarine pigment titanium dioxide, or carbon black.

Claim 11 (previously presented)

11. The aqueous pigment formulation according to claim 1 wherein the filler is chalk, talc, kaolin or silicate.

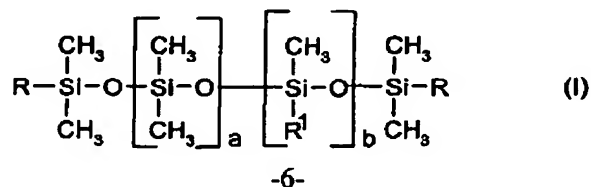
Claim 12 (previously presented)

12. The aqueous pigment formulation according to claim 1, which further comprises the auxiliary and/or additive is a defoamer, biocide, antisetling agent, neutralizing agent, thickeners, humectant, stabilizing agent, siccative, light stabilizer.

Claim 13 (cancelled)

Claim 14 (currently amended)

14. An aqueous pigment ~~paste, ink or paint~~ formulation of claim 5, wherein the which ~~comprises a pigment, optionally a filler, and~~ at least one organofunctional modified



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polysiloxane of the general formula

in which

R is in each case identical or different and is R¹ or -CH₃,

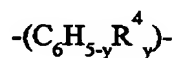
R¹ is -(CH₂)_c-O-(CH₂-CH(Ph)-O)_e-(C_nH_{2n-x}R²_x-O)_d-R³ wherein e is ≥ 1, or

R¹ is at least one -(CH₂)_c-O-(CH₂-CH(Ph)-O)_e-(C_nH_{2n-x}R²_x-O)_d-R³ and is at least one -CH₂-CHR*-Ph wherein e is 0 or ≥ 1, with the proviso that if e is 0 the value of b is an integer > 1;

R* is H or -CH₃,

R² is an alkyl residue having 1 to 5 carbon atoms, preferably -CH₃,

Ph is a phenyl derivative having the general formula



in which

R⁴ is a hydroxyl residue, an alkyl residue or an alkoxy residue, and

y is from 0 to 5,

R³ is hydrogen, an alkyl chain, a benzyl residue, an alkyl-substituted benzyl residue, a group COR⁵ with a residue R⁵ which has an alkyl chain, a group CONHR⁶ with a residue R⁶ which comprises a hydrogen atom or an alkyl chain, or CO₂R⁷, wherein R⁷ is alkyl chain,

c is from 2 to 6,

d is from 3 to 70,

n is ~~from 2 to 4, preferably 2 or 3,~~

x is 0 or 1,

a is from 0 to 100,

b is from 1 to 100,

with the proviso that a + b = 1 to 100; and

further optionally comprises a filler.